

# $3^{rd}$ Central European Symposium for Aquatic Macroinvertebrate Research

8-13 July 2018 Łódź, Poland

## **BOOK OF ABSTRACTS**

## **CONTENTS**

1.	ORGANIZING COMMITTEE	1
2.	SCIENTIFIC COMMITTEE	2
3.	PLENARY SPEAKERS	3
4.	GENERAL INFORMATION	5
5.	SCIENTIFIC PROGRAMME	9
6.	LIST OF POSTERS	13
7.	ABSTRACTS OF PLENARY LECTURES	18
8.	ABSTRACTS OF ORAL PRESENTATIONS	23
9.	ABSTRACTS OF POSTER PRESENTATIONS	83
10.Notes		165
11.LIST OF PARTICIPANTS		170
12.Index		174

### ORGANIZING COMMITTEE at the Department of Invertebrate Zoology & Hydrobiology University of Łódź:

CHAIR: KAROLINA BĄCELA-SPYCHALSKA

MARIA BRZOZOWSKA

HEDVIG KRISZTA CSAPÓ

PIOTR GADAWSKI

KAMIL HUPAŁO

ALEKSANDRA JABŁOŃSKA

ALICJA KONOPACKA

Tomasz Mamos

TOMASZ REWICZ

Grzegorz Tończyk

WERONIKA WRZESIŃSKA

ANNA WYSOCKA (Department of Genetics, University of Gdańsk, Poland)

#### **Volunteers:**

Olga Antczak

Jarek Brodecki

Agata Chiżyńska

Magda Florkowska

Marta Gellert

Aleksandra Góralczyk

Ewa Janowska

Agnieszka Mroczkowska

Sylwia Pietrzak

Angelika Radwańska

Robert Sobczyk

Sylwia Woźniak

#### **SCIENTIFIC COMMITTEE:**

Chair: MICHAŁ GRABOWSKI (University of Łódź, Poland)

ZOLTÁN CSABAI (University of Pécs, Hungary)

FEDOR CIAMPOR (Slovak Academy of Sciences, Slovakia)

FLORIAN LEESE (University of Duisburg-Essen, Germany)

KESTUTIS ARBACIAUSKAS (Vilnius University, Lithuania)

JAROSŁAW KOBAK (Nicolaus Copernicus University, Poland)

PETR PAŘIL (Masaryk University, Czech Republic)

OANA TEODORA MOLDOVAN (Emil Racovitza Institute of Speleology, RAS, Romania)

VITALIY SEMENCHENKO (National Academy of Sciences, Belarus)

MOMIR PAUNOVIĆ (IBISS, University of Belgrade, Serbia)

ANA PREVIŠIĆ (University of Zagreb, Croatia)

LADISLAV HAMERLIK (Matthias Belius University, Slovakia)

MAJA RAKOVIĆ (IBISS, University of Belgrade, Serbia)

WOLFRAM GRAF (University of Natural Resources and Life Sciences, Austria)

LYUBOMIR KENDEROV (Sofia University "St. Kliment Ohridski", Bulgaria)

# Aquatic macroinvertebrate community patterns as a tool prioritization of River Basin Specific Pollutants

Popović N  $^{(1)}$ , Tubić B  $^{(1)}$ , Raković M  $^{(1)}$ , Marinković N  $^{(1)}$ , Csányi B  $^{(2)}$ , Szekeres J  $^{(2)}$ , Borza P  $^{(2)}$ , Slobodnik J  $^{(3)}$ , Liška I  $^{(4)}$ , Milošević Đ  $^{(5)}$ , Kolarević S  $^{(6)}$ , Ilić M  $^{(1)}$ , Mitrović M  $^{(1)}$ , Paunović M  $^{(1)}$ 

This study was carried out to identify relations between the macroinvertebrate communities and River Basin Specific pollutants (RBS pollutants) in the Danube River. The investigation was performed on 68 sites along 2,500km of the Danube. Forward Selection (FS) method, Canonical Correspondence Analyses (CCA) and the Spearman correlation coefficient (SC) were used to identify the relations between macroinvertebrate dataset and selected biological metrics and RBS pollutants. Out of 20 analysed pollutants, seven (2,4-Dinitrophenol, Chloroxuron, Bromacil, Dimefuron, Amoxicillin, Bentazon and Fluoranthene) were found to be significantly correlated with macroinvertebrate communities. Bentazon, Dimefuron, 2,4-Dinitrophenol, Fluoranthene and Chloroxuron showed negative correlation with total number of taxa and abundance of Trichoptera, Diptera, Oligochaeta, Crustacea and Odonata, as well as abundance of Gastropoda and total number of taxa. To find synergistic influence of RBS pollutants on biota, BIO-ENV analysis was performed and reviled that 3 subsets of environmental variables were highly correlated with biota resemblance matrix, covering combination of same parameters singled out by FA.

<sup>(1)</sup> University of Belgrade, Institute for Biological Research "Siniša Stanković", Belgrade, Serbia

<sup>(2)</sup>MTA (Hung. Acad. Sci.), Centre for Ecological Research, Danube Research Institute, Hungary

<sup>(3)</sup>Environmental Institute, Koš, Slovak Republic

<sup>(4)</sup>International Commission for the Protection of the Danube River, Vienna, Austria

<sup>(5)</sup> Department of Biology and Ecology, Faculty of Sciences and Mathematics, University of Niš, Niš, Serbia

<sup>(6)</sup> University of Belgrade, Faculty of Biology, Belgrade, Serbia